STS Consultants, Ltd.
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May 26, 2000

Mr. Fred Micke, On-Scene Coordinator
Ms. Verneta Simon, On-Scene Coordinator
U.S. Environmental Protection Agency
Region 5
77 West Jackson Blvd., SE-5J
Chicago, IL 60604

RE: Grade Beam and Right-of-Way Excavations, North Columbus Drive RV3 Site – STS Project No. 24418-XK

Dear Mr. Micke and Ms. Simon:

This letter is to advise you of the proposed schedule and anticipated procedure for the grade beam excavations, with particular attention to the perimeter of the site where the excavation sideslopes will involve portions of the right-of-way. Current progress on the caisson installation indicates excavation for grade beams may begin around June 7, 2000. A sequence for the grade beam excavations is also attached.

Grade Beams

Attached please find a plan showing the areas which will be involved in the proposed excavations for the grade beams (Figure 1). This plan shows the minimum extent of the excavations given slopes of 1.5 horizontal to 1 vertical resulting from the excavation to the required depths for grade beam construction. Note that this extent involves the entire sidewalk to the curb, and much of Area C.

We have also attached a schedule which presents the proposed sequence for excavation of the grade beams. Note that the first three series of excavations include the perimeter of Area C (E line 18-25 along the south, E-25 to A-25 along the east, and A-25 to A-18 along the north). The next four series will move from east to west across the site (B, C and D 23 through 25; B-22 to D-22; B-21 to D21; B-20 to D-20). It is anticipated that these seven series of grade beam excavations will remain open before placement of concrete begins.

As these excavations are opened, the soil will be surveyed for gamma radiation in accordance with the Work Plan. Excavation lifts will be limited to two foot thicknesses or less. Excavations in areas which were previously excavated, remediated and backfilled with clean fill will not require monitoring.

Along the perimeter grade beams, the excavation slope will extend to the curb. Typical cross-sections are shown on Figure 2. Where thorium contamination may remain in the walls (sloped side

within the ROW), such as may be the case along Columbus Drive (see Detail Section 6/2 on Figure 2), the soil will be covered with plastic sheeting and plywood sheeting to isolate these soils from the construction activity. The presence of numerous utilities at depths below what is proposed to be excavated precludes further excavation. Section 6/2 shows the anticipated location of a ComEd line. If activities are sufficiently high that μR surveys on the plywood indicate further reduction is recommended, i.e., 200 μR or higher on contact, steel plates will be added over the plywood while work proceeds in the grade beam excavation. Backfill soil and the concrete sidewalk slab will provide shielding following construction.

The perimeter excavation in areas with contamination beneath the sidewalk will attempt to open a minimum section at one time before the contaminated material is covered. This minimum interval will be one column bay at a time.

Area B Basement Excavation

Area B is the portion of the site that will have a basement excavated. Along Grand Avenue on the north, near the alley along the west margin of Area B, steel sheeting will be installed to retain the soils outside of the excavation. The majority of the sides adjoining Area C to the east, Area B to the west, and Illinois Street to the south will be sloped to provide stable margins to the excavation.

Where contamination remains beneath the ROW outside the steel sheeting, there will be an excavated slope from the top of sheeting at approximately elevation minus five feet below street grade, extending out at 1.5 horizontal to 1 vertical. See Detail Section 10/3 on Figure 2, for the Grand Avenue section. See Detail Section 4/2 on Figure 2 for a section from Illinois Street. All contaminated soil within that wedge will be removed. Removal of the remaining soil is constrained by utilities under the ROW. Typical cross-sections are shown on Figure 2. Contaminated soil which remains in the slope will be covered with plastic sheeting and plywood sheeting to isolate the soil from construction activities.

Area A Removal

Area A will be starting removal in early June, following the removal of all material identified as contaminated in Area B. It should be noted that the alley, which is located along the back of the building that remain on the northwest corner of the block, is not part of Area A. It is not planned to remove contamination which may extend under the alley ROW. Steel sheeting may be installed to provide for retaining soil outside of the grade beam excavations. No detail sections are currently available illustrating the Area A earth retention details.

In order to discuss these several issues, we propose a meeting either on-site or at the Grand Pier offices. The tentative date we request is May 31, 2000. Please advise us if this date fits your schedule.

Regards,

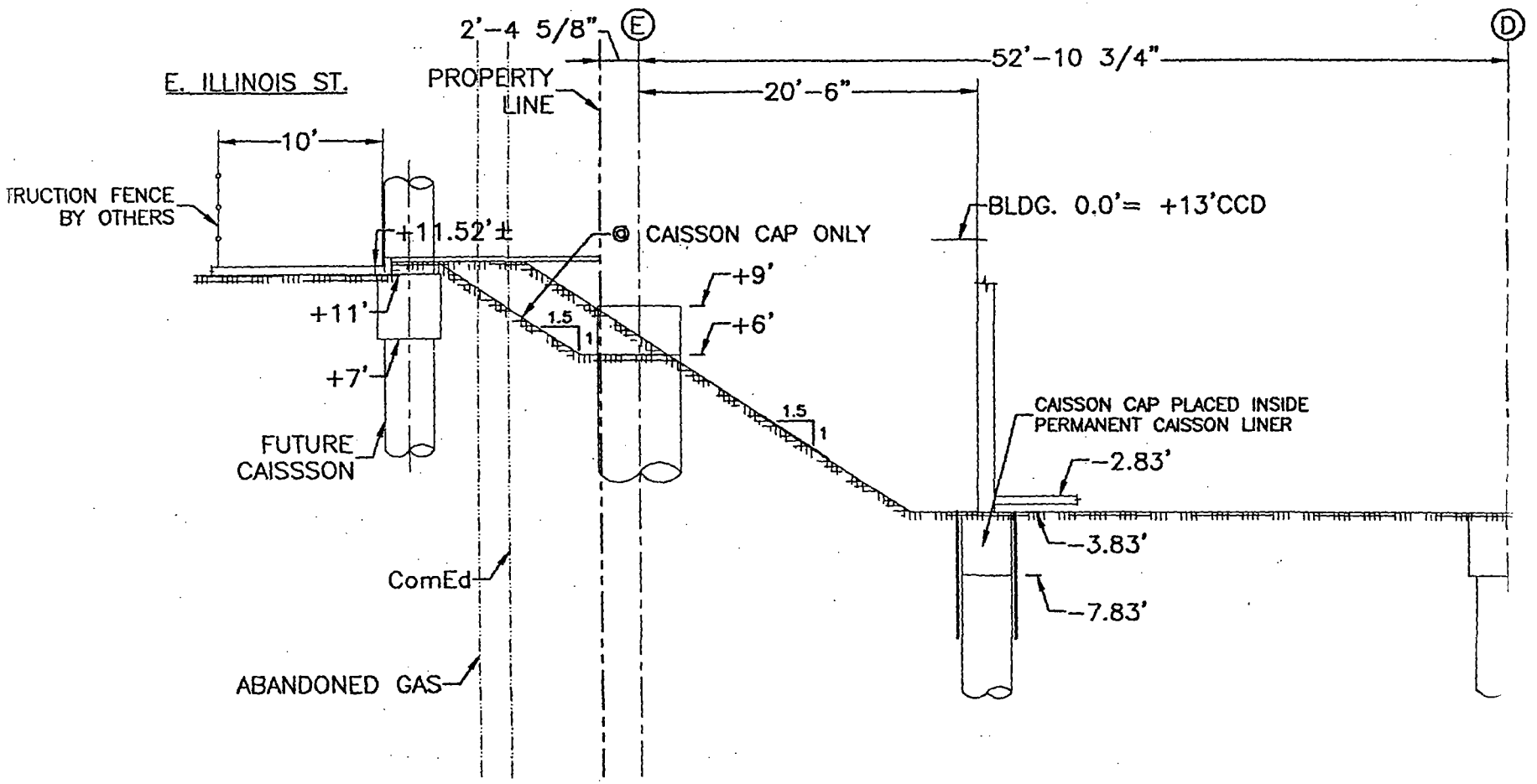
STS CONSULTANTS, LTD.

Richard G. Berggreen, C.P.G.
Principal Geologist

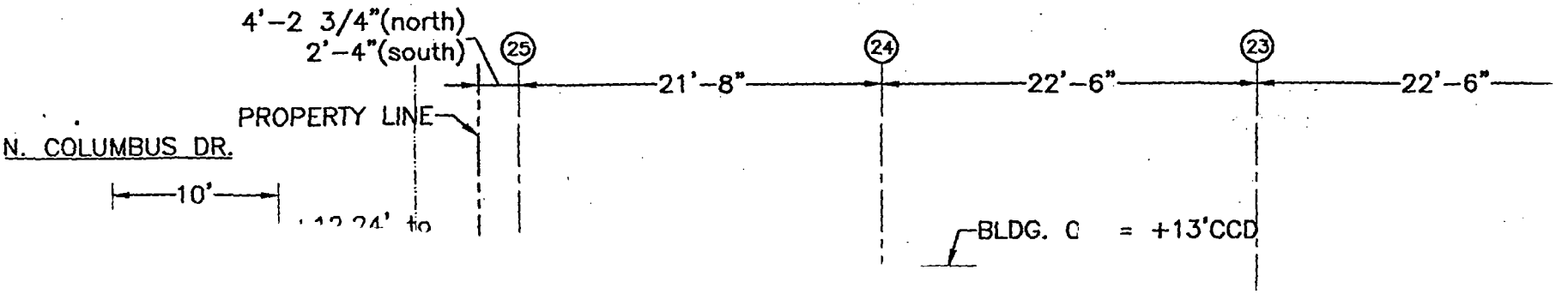
Enclosures

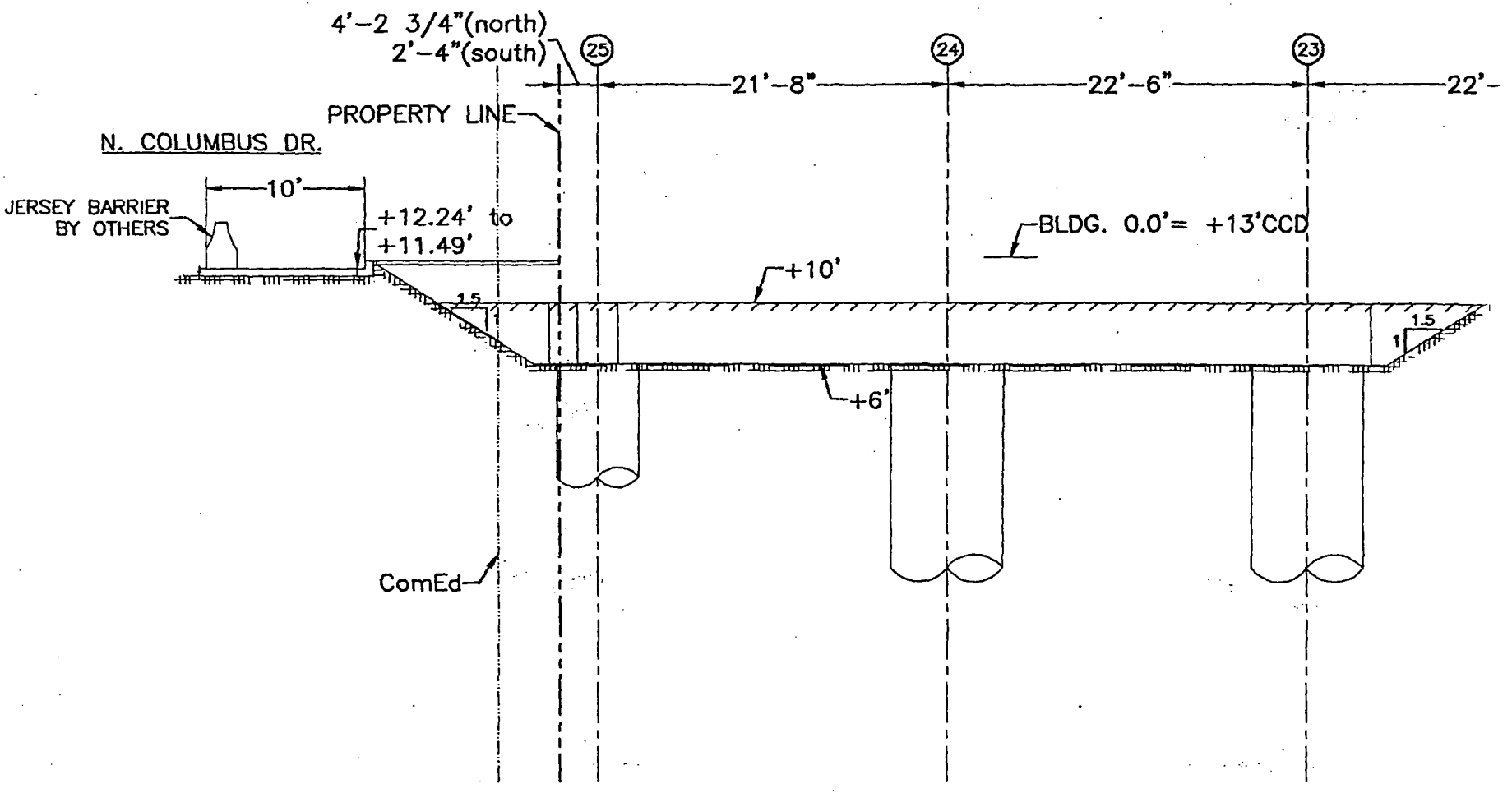
Cc: Mike Witte, Grand Pier
Rick Mueller, Bill Anaya, Johnson & Bell
Tom Dimond, Mayer, Brown & Platt
Dan White, Kerr McGee
Bernie Bono, Bono Consulting
Mark Placek, Morse-Diesel
J. T. Smith, Covington & Burling

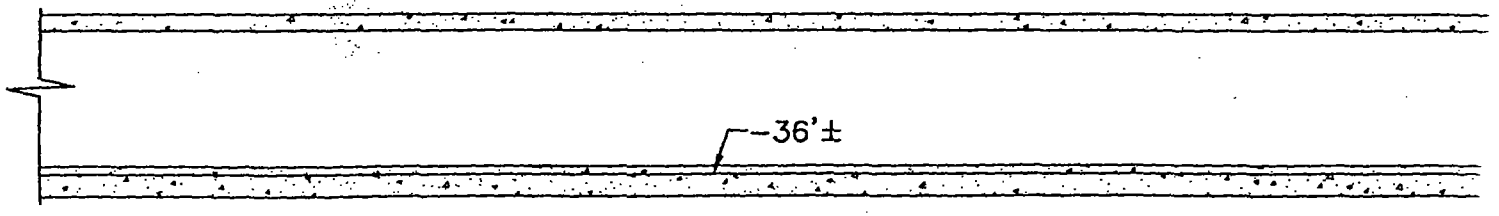
Typical Detail Sections from Figure 2


2'-4 5/8"
E
D
52'-10 3/4"
E. ILLINOIS ST.
PROPERTY LINE
20'-6"
10'
TRUCTION FENCE BY OTHERS
+11.52'±
@ CAISSON CAP ONLY
BLDG. 0.0'= +13'CCD
+9'
+11'
+6'
1.5
1
+7'
1.5
1
CAISSON CAP PLACED INSIDE PERMANENT CAISSON LINER
FUTURE CAISSSON
-2.83'
-3.83'
ComEd
-7.83'
ABANDONED GAS

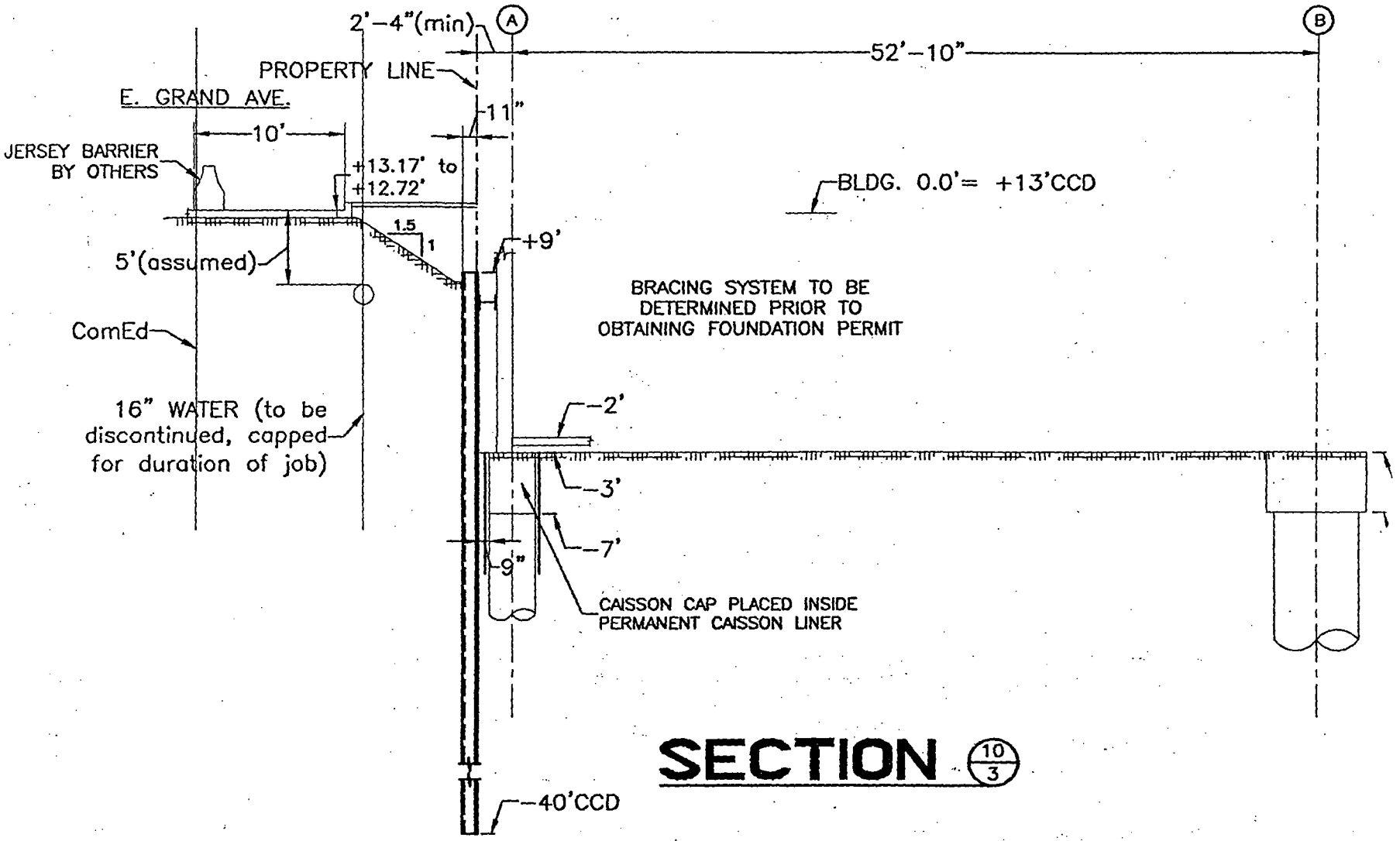
SECTION 4/2


4'-2 3/4"(north)
2'-4"(south)
25
24
23
21'-8"
22'-6"
22'-6"
PROPERTY LINE
N. COLUMBUS DR.
10'
BLDG. C = +13'CCD

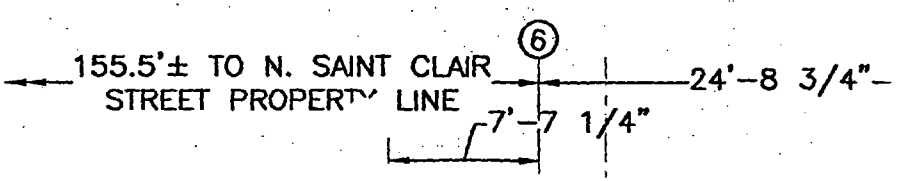

4'-2 3/4"(north)
2'-4"(south)
25
24
23
21'-8"
22'-6"
22'-
PROPERTY LINE
N. COLUMBUS DR.
10'
JERSEY BARRIER
BY OTHERS
+12.24' to
+11.49'
BLDG. 0.0'= +13'CCD
+10'
1.5
1
1.5
1
+6'
ComEd


36'±

SECTION 6/2


2'-4"(min)
A
B
52'-10"
PROPERTY LINE
E. GRAND AVE.
10'
11"
JERSEY BARRIER
BY OTHERS
+13.17' to
+12.72'
BLDG. 0.0'= +13'CCD
1.5
1
+9'
5'(assumed)
BRACING SYSTEM TO BE
DETERMINED PRIOR TO
OBTAINING FOUNDATION PERMIT
ComEd
16" WATER (to be
discontinued, capped
for duration of job)
2'
3'
7'
9"
CAISSON CAP PLACED INSIDE
PERMANENT CAISSON LINER
40'CCD

SECTION 10/3


155.5'± TO N. SAINT CLAIR
STREET PROPERTY LINE
6
24'-8 3/4"
7'-7 1/4"